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<b>PRE-APPEAL BRIEF REQUEST FOR REVIEW</b>		Docket Number (Optional)	
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I hereby certify that this correspondence is being deposited with the United States Postal Service with sufficient postage as first class mail in an envelope addressed to "Mail Stop AF, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450" [37 CFR 1.8(a)]		Application Number	Filed
on _____		10/775,174	February 11, 2004
Signature _____		First Named Inventor	
Typed or printed name _____		Ernest L. LAWTON et al.	
		Art Unit	Examiner
		1798	Gray, Jill M.

Applicants request review of the final rejections of claims 1, 3-4, 6-7, 14-15, 19-20, 22-23, 27-36, 38-40, 42-48, and 50-52 in the above-identified application. An Amendment After Final is being filed with this request that cancels certain claims. No claim amendments are being made.

This request is being filed with a notice of appeal.

The review is requested for the reason(s) stated on the attached sheet(s).

Note: No more than five (5) pages may be provided.

I am the

☐ applicant/inventor.

☐ assignee of record of the entire interest.  
See 37 CFR 3.71. Statement under 37 CFR 3.73(b) is enclosed.

☒ attorney or agent of record.  
Registration number 41,469

☐ attorney or agent acting under 37 CFR 1.34.  
Registration number if acting under 37 CFR 1.34 \_\_\_\_\_



Signature

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Typed or printed name

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June 6, 2011

Date

NOTE: Signatures of all the inventors or assignees of record of the entire interest or their representative(s) are required.  
Submit multiple forms if more than one signature is required, see below.

☒ \*Total of 1 form is submitted.

This collection of information is required by 35 U.S.C. 132. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.11, 1.14 and 41.6. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Mail Stop AF, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450

**PRE-APPEAL BRIEF REQUEST FOR REVIEW**

**I. The Rejections under § 103(a)**

In the Final Office Action, the Examiner rejected the pending claims under 35 U.S.C. 35 U.S.C. § 103(a) as being unpatentable over Bartrug (U.S. Patent No. 3,583,882) in view of Girgis (U.S. Patent No. 4,440,881). Applicants disagree with the Examiner's arguments and conclusions in the Final Office Action. Girgis does not teach or suggest Applicants' claimed particle range of "from 10 nm to 35 nm," as recited in independent claim 1, based on its broad disclosure of "less than 200 nm." Additionally, Applicants have shown that their claimed range imparts different properties to the claimed products.

**II. Girgis's General Teaching of Particle Sizes Lower than 200 nm Does Not Teach Particles Ranging from 10 nm to 35 nm**

In the Final Office Action it appears that the Examiner has abandoned the position that Girgis's broad disclosure of particle sizes lower than 200 nm teaches or suggests the claimed average particle size of 10 nm to 35 nm. Nothing in Girgis's generalized teaching of particles less than 200 nm points to particles 10 nm to 35 nm in size. Thus, the argument that any range below 200 nm is obvious in view of Girgis cannot stand.

The Examiner stated that Girgis's teachings of "various particle sizes lower than 200 nm such as 50 nm or 70 nm in combination with his desire for a low average particle size, would have provided motivation to the skilled artisan . . . to perform routine experimentation to determine an optimal and/or desirable particle size and range." (Office Action of April 28, 2010 at 8; see also Final Office Action at 6-7 (asserting the same).) However, Applicants submit there is nothing routine in testing all particle sizes

below 200 nm (and even below 50 nm for that matter) to see the effect, if any, of these particle sizes. Under the Examiner's reasoning, claims directed to 2 nm or 44 nm, as mere arbitrary examples, would also seemingly be obvious over Girgis, notwithstanding the fact that nothing in Girgis teaches these particular particle sizes. The Examiner's selection of particle sizes within the 200 nm range (in this case Applicants' claimed particle sizes of 10 nm to 35 nm) is impermissibly self-serving and based on hindsight, for it is solely based on Applicants' specific disclosures of ranges. The Examiner's approach to obviousness by hand-picking the claimed ranges is not sufficient to render the claimed particle range obvious over Bartrug in view of Girgis.

### **III. Applicants' Claimed Particle Sizes Are "A Matter of Invention"**

Applicants also submit that the pending claims are not obvious over the combination of Bartrug and Girgis under 35 U.S.C. § 103(a), because the sizes of particles used in the current invention alter the properties of the coated fibers to achieve different results. For example, Applicants found that the 35 nm particle size imparts a lower frictional tension to the coated strands, and also that the 35 nm particles do not open the filament bundle and reduce interfilament bonding. (Spec. at 156-159.) Thus, contrary to the Examiner's position that the claimed average particle size range is not a "matter of invention," Applicants found that the 35 nm particle sizes altered the properties of the filament bundles.

More specifically, Applicants have found that 35 nm particles reduce the frictional tension of coated fibers to a value of 140 g, with a standard deviation of 21.9 g. (*Id.* at 157, Table 20A.) Accordingly, the 35 nm particles reduce the frictional tension of fibers by at least 160 g (based on a 300 g value for uncoated fibers), and even as much

as 181.9 g when accounting for the 21.9 g standard deviation. (*Id.*) Additionally, the specification states that the 35 nm particles in the binder composition do not reduce the interfilament bonding of the filament bundle, and the specification provides data in Figure 14 showing that this aspect was at least observed for pressures below 40 psi. (*See id.* at 158-59.)

By showing that the 35 nm particles impart different properties to the coated strands, Applicants have provided evidence of a result different in kind, not just degree, which is directly attributable to the particle dimensions claimed. This finding sets the current facts apart from those of *In re Aller* and *In re Rose* (upon which the Examiner continues to attempt to rely), where there was no evidence that the claimed changes in temperature and concentration for a chemical reaction, or the changes in size and weight of lumbar packages, respectively, resulted in a change of kind, as opposed to just degree. *See In re Aller*, 105 USPQ 233, 235 (C.C.P.A. 1955); *In re Rose*, 105 USPQ 237, 240 (C.C.P.A. 1955). Thus, the Examiner's assertion that the size of an article, such as the particle size, is not ordinarily a matter of invention cannot stand. *Cf.* MPEP § 2144.04(IV)(A).

The Examiner's position requiring a "back-to-back" comparison between the claimed device and a device having an average particle size of 50 nm is inappropriate. (*See Final Office Action* at 4.) For a *prima facie* case of obviousness, it is the Examiner's burden to provide rationale or evidence to support its position that a device having 50 nm particle sizes would function similarly to the claimed device. Mere conclusory and unsupported statements that a 50 nm particle size range would not "function differently than that of the claimed invention, i.e. reduce tackiness of the glass

fiber product" (e.g., Final Office Action at 4) or that "a limitation with respect to the size of an article, where the only difference between the prior art and the claims was a recitation of relative dimensions and that as such the claimed invention would not perform differently than the prior art device" (e.g., *id.* at 5) do not satisfy the Examiner's obligations.

Moreover, the Examiner's position that Bartrug and Girgis teach particle sizes within the claimed range is not correct. (Final Office Action at 7.) As discussed, the claims recite 10 nm to 35 nm, a range that is not taught or suggested by either reference. So the Examiner's assertion that it has "reason to believe that the properties such as the tractive tension of the glass fiber product, frictional tension, separation of filaments or reduction in the degree of interfilament bonding are within the parameters contemplated by applicants" cannot stand. (*See id.* at 7.)

#### **IV. Conclusion**

For the foregoing reasons, Bartrug in view of Girgis does not teach or suggest each and every element of the pending claims, or render the pending claims obvious under 35 U.S.C. 103(a). Applicants therefore submit that the 35 U.S.C. § 103(a) rejection of pending claims 1, 3, 4, 6, 7, 14, 15, 19, 20, 22, 23, 27-36, 38-40, 42-48, and 50-52 in view of Bartrug and Girgis is improper. Applicants therefore request withdrawal of the rejections and the prompt allowance of the pending claims.